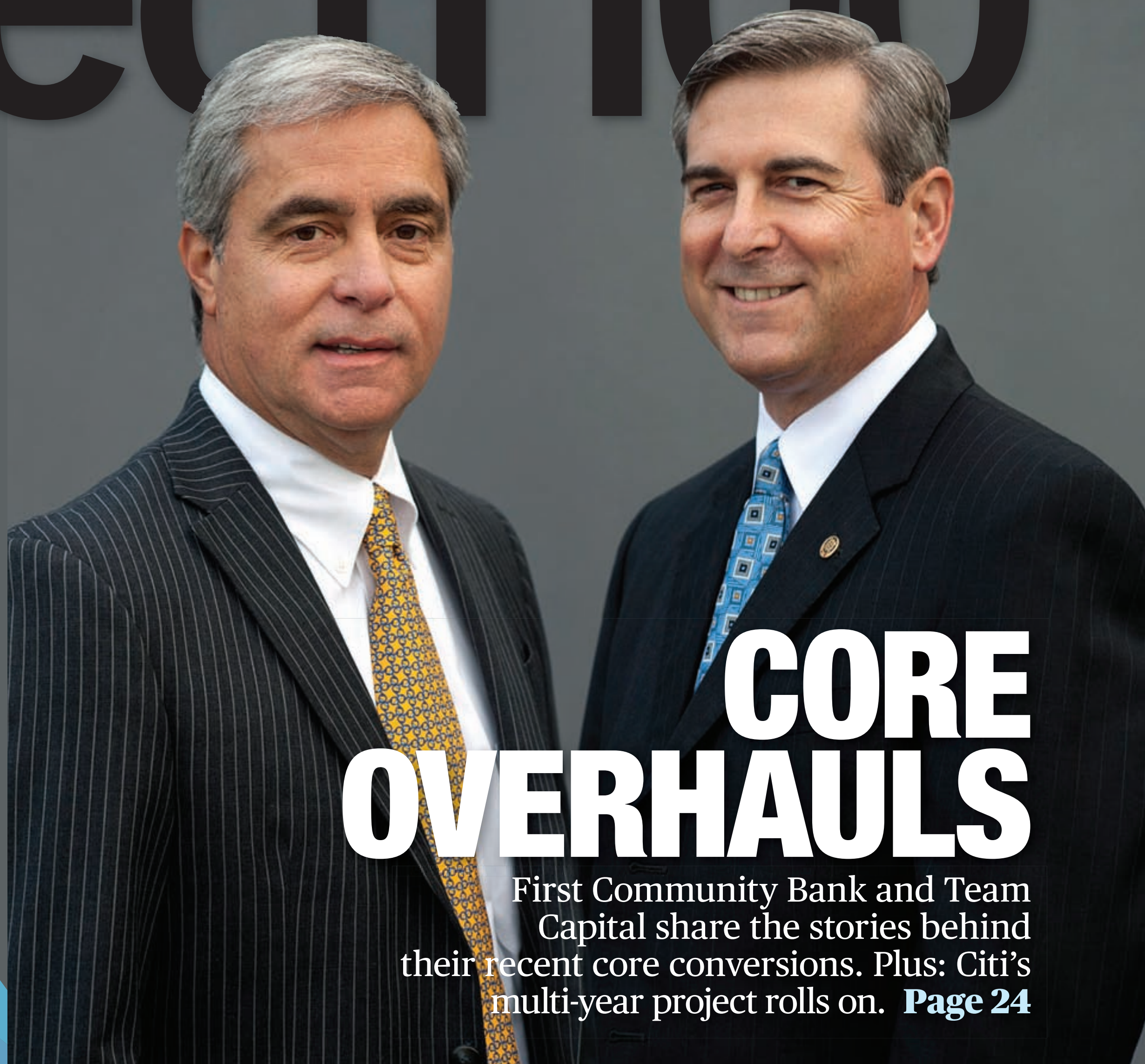
FinTech100

October 2012

ANNUAL SPECIAL REPORT



CORE OVERHAULS

First Community Bank and Team Capital share the stories behind their recent core conversions. Plus: Citi's multi-year project rolls on. **Page 24**

TOP 10 IN FINTECH

Find out who made the upper echelon of this year's ranking of financial technology providers.

- #1 FIS
- #2 Tata
- #3 Fiserv
- #4 Sungard
- #5 NCR

THE GLOBALIZATION OF FINTECH

Forty percent of this year's top 100 financial technology companies are overseas.

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The Big Risks of Big Data

The Benefits of Merchant-Funded Rewards

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AMERICAN BANKER
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FIN TECH 100
OCTOBER 2012

Frank Martire,
Chairman and CEO, FIS

AMERICAN BANKER.

btn BANK TECHNOLOGY NEWS

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Pent-up Merger Activity Builds

By Karen Massey

"We expect to see continued merger and acquisition activity in this space since the number of providers is still large and financial institution clients continue to exert cost containment pressure."

Technology is the backbone of financial services, enabling efficiency and driving innovation in products and services. And when financial institutions are faced with business or regulatory challenges, they frequently turn to technology consultants and providers for guidance and solutions. Some of the prominent issues that vendors are paying attention to are compliance and governance; big data and analytics; evolving business models, including payments; optimal utilization of cloud and outsourcing; and meeting customers' changing demands.

Three things in particular strike me about this year's FinTech 100:

• Impressive revenue growth: FinTech 100 vendors collectively grew their revenues from $53 billion in 2010 to $64 billion in 2011, almost a 20% increase. Gross World Product grew 3.5% during this same time.

• Increasing globalization: 40% of the FinTech 100 hail from outside the US.

• Predominance of outsourcers and service providers: Almost 50% of FinTech providers are in this category.

After several years of anemic merger and acquisition activity, the pace of acquisitions among the FinTech 100 accelerated significantly in 2011. In 2009, there were only two acquisitions among the FinTech and there were four in 2010. In 2011, that number doubled to eight FinTech providers acquired over the course of the year. The increase in M&A activity, still way below pre-financial crisis levels, is primarily attributable to pent-up demand and curtailed activity in the previously sour economy. Five of the eight acquired vendors were from outside the U.S., further evidence of the increasing globalization of the FinTech 100.

Acquisitions in 2011 were dominated by providers of IT services, payments, and risk management. IT services and outsourcing were due for consolidation given maturation and the search for cost efficiencies. We expect to see continued M&A activity in this space since the number of providers is still large and clients exert continued cost containment pressures.

Globalization will be a continued theme, as evidenced by U.S.-based IT services firm iGate's acquisition of Indian outsourcer Patni Computer Systems. Consultant and outsource provider Capgemini acquired a majority interest in CPM Braxis, a Brazilian IT services company. Business processing and tech management firm Genpact acquired U.S.-based Headstrong Services, a provider of consulting and IT services.

Two acquisitions occurred in 2011 by payment providers: electronic payment processor Verifone acquired US-based Hypercom upon Hypercom's divestiture of its U.S. payment systems business per regulatory approval; and payments firm ACI Worldwide acquired S1, one of the last stand-alone payments and channels solution companies in the U.S.

These three round out the M&A list: IBM acquired Algorithmics of Canada, provider of risk management solutions. Wolters Kluwer Financial Services acquired compliance and risk management company FRS Global of Belgium. Misys acquired capital markets firm Sophis of Ireland.

This year we welcome 14 new entrants to the FinTech 100: Genpact (N.Y.), Computer Services Inc. (Ky.), Simplex Consulting Inc. (Japan), BRQ IT Services (Brazil), NIIT Technologies Inc. (GA) , Silverlake Axis (Malaysia), Carlisle & Gallagher Consulting Group (NC), ARGO (TX), TransCentra Inc.(formerly Regulus) (GA), GBST Holdings Limited (Australia), Diasoft (Russia), TAS Group (Italy), eFront S.A. (France), and Primatics Financial (VA).

In the top 10, the largest revenue increases come from Tata Consulting Services (TCS) and Cognizant, both IT services providers and outsourcers, which proves the prominence of outsourcing and services providers in the industry. First Data also rose in the rankings among the top 10 from #8 to #7.

The Enterprise 25 also saw two new entrants. Financial management provider Intuit enters the Enterprise ranking at #24. Also joining the Enterprise 25 is outsourcing provider of managed computing Savvis, a CenturyLink Company based in Missouri, debuting at #25. IBM and HP continue to dominate the top spots. Microsoft achieved the greatest upward movement, jumping from #6 in 2010 to #3 this year. ■

Karen Massey is senior analyst, consumer banking, at IDC Financial Insights.

Top 100 Companies in FinTech

RANK 2012	RANK 2011	COMPANY NAME		OWNERSHIP	CY 2011 REVENUE (MILLIONS) TOTAL	FINANCIAL SERVICES	% FS
1	1	**FIS**	Jacksonville, FL	Public	**$5,746**	$4,999	87
2	3	**Tata Consultancy Services Limited (TCS)**	Mumbai, India	Public	**9,767**	4,250	44
3	2	**Fiserv, Inc.**	Brookfield, WI	Public	**4,337**	4,120	95
4	4	**SunGard**	Wayne, PA	Private	**4,499**	3,190	71
5	5	**NCR Corporation**	Duluth, GA	Public	**5,443**	2,999	55
6	6	**Diebold, Incorporated**	North Canton, OH	Public	**2,836**	2,639	93
7	8	**First Data Corporation**	Atlanta, GA	Private	**10,714**	2,574	24
8	12	**Cognizant Technology Solutions**	Teaneck, NJ	Public	**6,121**	2,518	41
9	9	**Nomura Research Institute, Ltd.**	Tokyo, Japan	Public	**4,109**	2,489	61
10	10	**Infosys Limited**	Bangalore, India	Public	**6,825**	2,418	35
11	7	**Lender Processing Services**	Jacksonville, FL	Public	**2,090**	2,027	97
12	11	**Wincor Nixdorf Inc.**	Paderborn, Germany	Public	**2,983**	1,969	66
13	13	**Total System Services, Inc. (TSYS)**	Columbus, Georgia	Public	**1,809**	1,809	100
14	14	**CA Technologies**	Islandia, NY	Public	**4,754**	1,807	38
15	15	**DST Systems**	Kansas City, MO	Public	**1,744**	1,116	64
16	17	**SAS Institute**	Cary, NC	Private	**2,725**	1,090	40
17	16	**CoreLogic**	Santa Ana, CA	Public	**1,339**	1,030	77
18	18	**Jack Henry & Associates, Inc.**	Monett, MO	Public	**994**	994	100
19	31	**Misys**	London, UK	Public	**897**	897	100
20	19	**Equifax**	Atlanta, Georgia	Public	**1,960**	804	41
21	22	**EDB Ergo Group**	Oslo, Norway	Public	**2,108**	801	38
22	NR	**Genpact**	New York, NY	Public	**1,600**	669	42
23	36	**Ingenico**	Paris, France	Public	**1,300**	611	47
24	21	**Broadridge Financial Solutions, Inc.**	Lake Success, NY	Public	**2,167**	520	24
25	27	**FICO**	Minneapolis, MN	Public	**634**	501	79
26	24	**Experian Group Limited**	Costa Mesa, CA	Public	**4,337**	477	11
27	25	**Temenos Group AG**	Geneva, Switzerland	Public	**473**	473	100
28	34	**ACI Worldwide**	Naples, FL	Public	**465**	450	97
29	32	**Syntel, Inc.**	Troy, MI	Public	**642**	450	70
30	30	**Fidessa group PLC**	London, UK	Public	**445**	445	100
31	28	**Murex**	Paris, France	Private	**445**	445	100
32	26	**IPC Systems, Inc.**	Jersey City, NJ	Private	**506**	439	87
33	20	**Oberthur Card Systems S.A.**	Nanterre, France	Private	**1,185**	415	35
34	29	**Itautec S.A.**	São Paulo, Brazil	Private	**923**	401	43
35	41	**D+H**	Toronto, Canada	Public	**733**	390	53
36	33	**Open Solutions Inc.**	Glastonbury, CT	Private	**383**	383	100
37	37	**SS&C Technologies, Inc.**	Windsor, CT	Public	**371**	371	100
38	38	**Polaris Financial Technologies**	Chennai, India	Public	**372**	365	98
39	48	**Wolters Kluwer Financial Services**	Minneapolis, MN	Public	**340**	340	100
40	42	**Advent Software, Inc.**	San Francisco, CA	Public	**326**	326	100
41	23	**MphasiS (An HP Company)**	Bangalore, India	Private	**913**	326	36
42	44	**Moody's Analytics**	New York, NY	Public	**722**	325	45
43	45	**TransFirst Holdings, Inc**	Broomfield, CO	Private	**865**	311	36
44	43	**Harland Financial Solutions**	Lake Mary, FL	Private	**286**	286	100
45	46	**3i Infotech (Includes 3i Infotech Billing & Payments)**	Mumbai, India	Public	**427**	267	63
46	70	**Six Payment Services**	Zurich, Switzerland	Private	**424**	265	64
47	47	**SimCorp A/S**	Copenhagen, Denmark	Public	**252**	252	100
48	54	**L&T Infotech**	Mumbai, India	Private	**643**	249	39
49	67	**Pegasystems Inc.**	Cambridge, MA	Public	**417**	234	56
50	51	**Aegis Global Communications**	Irving, TX	Private	**700**	231	33

American Banker/*Bank Technology News*/Financial Insights FinTech 100 (2012)

Top 100 Companies in FinTech

RANK 2012	RANK 2011	COMPANY NAME		OWNERSHIP	CY 2011 REVENUE (MILLIONS) TOTAL	FINANCIAL SERVICES	% FS
51	49	**GFT Technologies AG**	Stuttgart, Germany	Public	$352	$229	65
52	61	**Calypso Technology**	San Francisco, CA	Private	**220**	216	98
53	64	**Fundtech Ltd.**	Jersey City, NJ	Private	**210**	210	100
54	55	**Charles River Development**	Burlington, MA	Private	**208**	208	100
55	58	**Collabera**	Morristown, NJ	Private	**441**	205	46
56	52	**Ness Technologies**	Teaneck, NJ	Public	**569**	193	34
57	53	**GlobeOp Financial Services**	London, UK	Public	**221**	189	86
58	57	**Linedata Services S.A.**	Neuilly-sur-Seine, Paris	Public	**185**	185	100
59	59	**BancTec, Inc.**	Irving, TX	Private	**254**	178	70
60	NR	**Computer Services, Inc.**	Paducah, KY	Public	**174**	174	100
61	NR	**Simplex Consulting, Inc.**	Chuo-ku, Japan	Private	**170**	170	100
62	63	**Interactive Data Corporation**	Bedford, MA	Private	**868**	156	18
63	62	**Online Resources Corporation**	Chantilly, VA	Public	**155**	155	100
64	79	**Virtusa Corporation**	Westborough, MA	Public	**262**	151	58
65	NR	**BRQ IT Services**	Sao Paulo, Brazil	Private	**187**	140	75
66	72	**Hundsun Technologies INC**	Hangzhou, China	Public	**166**	140	84
67	86	**VASCO Data Security International, Inc.**	Oakbrook Terrace, Illinois	Public	**168**	137	81
68	80	**Luxoft**	Moscow, Russia	Private	**252**	128	51
69	74	**Open Link Financial**	Uniondale, NY	Private	**267**	127	48
70	71	**NICE Actimize**	New York, NY	Public	**124**	124	100
71	NR	**NIIT Technologies Inc**	Atlanta, GA	Public	**311**	121	39
72	NR	**Silverlake Axis**	Kuala Lumpur, Malaysia	Public	**122**	120	98
73	73	**Bravura Solutions**	Sydney, Australia	Public	**123**	119	97
74	83	**Bottomline Technologies**	Portsmouth, NH	Public	**211**	118	56
75	78	**Eagle Investment Systems LLC**	Wellesley, MA	Public	**115**	115	100
76	81	**Clear2Pay**	Diegem, Belgium	Private	**111**	111	100
77	75	**SmartStream**	London, UK	Private	**109**	109	100
78	84	**Hexaware Technologies Ltd.**	Navi Mumbai, India	Private	**308**	105	34
79	77	**Viewpointe**	New York, NY	Private	**100**	100	100
80	NR	**Carlisle & Gallagher Consulting Group**	Charlotte, NC	Private	**96**	95	99
81	82	**Callatay and Wouters**	Brussels, Belgium	Public	**94**	94	100
82	68	**ISGN Corporation**	Melbourne, FL	Private	**93**	93	100
83	91	**Scorto Corp.**	Cupertino, CA	Private	**125**	92	74
84	NR	**ARGO**	Richardson, Texas	Private	**86**	86	100
85	87	**Celero Solutions Inc.**	Calgary, Canada	Private	**81**	81	100
86	NR	**TransCentra Inc.**	Norcross, GA	Private	**161**	81	50
87	NR	**GBST Holdings Limited**	Milton, Australia	Public	**76**	76	100
88	NR	**Diasoft**	Moscow, Russia	Private	**76**	75	99
89	99	**Financial Technologies (I) Ltd**	Mumbai, India	Public	**75**	72	96
90	94	**Eze Castle Integration**	Boston, MA	Private	**70**	70	100
91	90	**COCC**	Avon, CT	Private	**69**	69	100
92	89	**Investment Technology Group, Inc.**	New York, NY	Public	**572**	69	12
93	NR	**TAS Group**	Rome, Italy	Public	**64**	58	90
94	96	**Multifonds**	Luxembourg	Private	**51**	51	100
95	NR	**eFront, S.A.**	Paris, France	Private	**51**	51	99
96	97	**WAUSAU Financial Systems**	Mosinee, WI	Private	**77**	50	65
97	98	**FNC, Inc.**	Oxford, MS	Private	**50**	50	100
98	92	**Nucleus Software Exports Ltd.**	Noida, India	Public	**49**	49	100
99	NR	**Primatics Financial**	McLean, VA	Private	**45**	45	100
100	100	**Novantas, llc**	New York, NY	Private	**39**	39	100

*American Banker/Bank Technology News/*Financial Insights FinTech 100 (2012)

How the Rankings Are Calculated

IDC Financial Insights relied on many sources to gather the data used in the FinTech 100 and Enterprise 25 rankings.

The research firm, along with American Banker, Bank Technology News and William Mills Agency, requested financial information from several thousand technology companies globally. Publicly available resources such as Hoovers, Edgar, company filings, and company Web sites were used to validate and augment data. IDC Financial Insights also used proprietary research, previously published reports, internal research under way, and IDC resources.

IDC Financial Insights determined eligible revenue. To be included, revenues must originate from software, hardware and IT services sold to financial institutions. Not included are revenues from any network, telecommunications, electronic exchanges, or data service (e.g., market/credit) providers. For vendors that provide qualifying services and solutions in addition to nonqualifying ones, we used just the qualifying portion of their revenue as the basis for our rankings. This is why vendors appear on the FinTech 100 list with revenues below 33%.

Companies on the FinTech 100 list are financial services technology providers that derive more than one-third of their total global revenue from the financial services industry. Enterprise 25 companies are horizontal technology firms that derive less than one-third of their revenues from financial institutions.

IDC Financial Insights and American Banker made a concerted effort to include all possible candidates for the rankings.

Some companies in qualifying industries that submitted forms did not make the rankings because of insufficient revenue or inability to validate submitted data. For companies outside the U.S., we calculated U.S. dollar figures using IDC's standard exchange rate for the year end 2011. ■

Top 25 Enterprise Companies in FinTech

RANK 2012	RANK 2011	COMPANY NAME		OWNERSHIP	CY 2011 REVENUE (MILLIONS) TOTAL	FINANCIAL SERVICES	% FS
1	1	**IBM**	Armonk, NY	Public	**$107,000,000,000**	$31,030,000,000	29%
2	2	**Hewlett-Packard**	Palo Alto, CA	Public	**$127,200,000,000**	$13,992,000,000	11%
3	6	**Microsoft**	Redmond, WA	Public	**$72,001,000,000**	$8,640,120,000	8%
4	3	**Dell, Inc.**	Round Rock, TX	Public	**$62,071,000,000**	$7,448,520,000	12%
5	4	**Fujitsu Limited**	Tokyo, Japan	Public	**$54,000,000,000**	$7,020,000,000	13%
6	7	**Accenture**	Dublin, Ireland	Public	**$28,659,000,000**	$5,649,000,000	20%
7	5	**Cisco Systems, Inc.**	San Jose, CA	Public	**$44,900,000,000**	$5,388,000,000	12%
8	8	**Oracle Corporation**	Redwood Shores, CA	Public	**$35,600,000,000**	$4,984,000,000	14%
9	10	**Intel**	Santa Clara, CA	Public	**$53,999,000,000**	$4,859,910,000	9%
10	9	**Hitachi**	Tokyo, Japan	Public	**$118,998,920,000**	$4,759,956,800	4%
11	12	**EMC**	Hopkinton, MA	Public	**$20,007,590,000**	$4,201,593,900	21%
12	11	**Thomson Reuters**	New York, NY	Public	**$13,807,000,000**	$4,004,030,000	29%
13	14	**Capgemini**	Paris, France	Public	**$13,477,000,000**	$2,787,000,000	21%
14	13	**CSC**	Falls Church, VA	Public	**$15,965,000,000**	$2,714,050,000	17%
15	16	**Wipro Technologies**	Bangalore, India	Public	**$7,210,000,000**	$1,946,700,000	27%
16	17	**ATOS Origin S.A**	Bezons, France	Public	**$8,277,260,000**	$1,903,769,800	23%
17	15	**Deloitte & Touche Tohmatsu**	New York, NY	Private	**$28,800,000,000**	$1,872,000,000	7%
18	18	**SAP AG**	Walldorf, Germany	Public	**$18,464,000,000**	$1,506,000,000	8%
19	19	**CGI Group Inc.**	Montreal, Canada	Public	**$4,207,257,000**	$1,058,890,000	25%
20	24	**HCL Technologies Ltd**	Noida, India	Public	**$3,901,000,000**	$1,014,260,000	26%
21	22	**Logica**	Reading, U.K.	Public	**$6,029,000,000**	$966,000,000	16%
22	23	**Unisys**	Blue Bell, PA	Public	**$3,853,800,000**	$847,836,000	22%
23	25	**Teradata Corporation**	Dayton, Ohio	Public	**$2,362,000,000**	$661,360,000	28%
24	NR	**Intuit, Inc.**	Mountain View, CA	Public	**$4,054,000,000**	$362,000,000	9%
25	NR	**Savvis, a CenturyLink company**	St. Louis, MO	Private	**$1,039,000,000**	$296,335,000	29%

*American Banker/Bank Technology News/*Financial Insights FinTech 100 (2012)

Biggest Movers

These companies made large jumps up or down in our rankings in 2011. We provide clues as to why

	PLACES CLIMBED/DECLINED	RANK 2012	RANK 2011	WHY
FinTech 100				
Six Payment Services	+24	46	70	SIX merged SIX Multipay, SIX Pay and SIX Card Solutions.
Vasco Data Security	+19	67	86	Landed several large transactions in the banking market.
Pegasystems	+18	49	67	Significant customer wins, including a large U.K. bank.
Virtusa Corporation	+15	64	79	Acquired ALaS Consulting LLC, a financial services consulting firm.
MphasiS	-18	41	23	Percentage of financial services revenue dropped from 42% to 36%.
ISGN	-14	82	68	Revenue dropped from $126 million to $90 million.
Oberthur	-13	33	20	Percentage of revenue from financial institutions dropped from 55% to 35%.
Itautec S.A.	-6	34	29	Revenue dropped from 2010 to 2011 while financial services percentage stayed the same.
Enterprise 25				
HCL Technologies Ltd.	+4	20	24	Company is seeing strong demand, signed several new contracts in 2011.
Microsoft	+3	3	6	Total revenue is up while financial services percentage stayed the same.
Teradata	+2	23	25	Two former Enterprise 25 companies dropped out, letting Teradata move up.
Cisco	-2	7	5	Cisco exited the Flip camera business, reorganized and faced strong competition.
Deloitte & Touche Tohmatsu	-2	17	15	Challenging market conditions.

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Bank Transformation Required for Continued Relevance

Banks' traditional, proprietary approach to information technology (IT) infrastructure has become unsustainable as the industry faces new risk and compliance requirements as well as new business demands from customers, partners, competitors, and employees. To meet today's challenges, leading financial institutions are doing more than just overhauling their core systems: they are optimizing their operations to achieve true business transformation.

The industry has begun embracing standardization, interoperability, and integration – an approach that helps them meet these new responsibilities while running their businesses, resulting in reduced costs and increased efficiency and effectiveness. Further, modernization based on these tenets is enabling them to improve their offerings and better serve customers.

"This industry-wide movement presents unprecedented opportunity for innovation and helps make banks more formidable competitors against those intent on disintermediation," says Eric Stine, senior vice president, North America financial services, SAP. "If all they do is modernize or automate what's happening today, then banks aren't really seizing the opportunity to leapfrog other industries," cautions Stine. "Done correctly, their investment can be leveraged to rebrand banking and make it more meaningful to the Millennial Generation."

As banks modernize, they are turning to outside resources that enable them to industrialize, standardize, and syndicate business processes – streamlining and simplifying their operations for improved efficiency.

PRESSURE TO MODERNIZE

It's a familiar story: new risk and compliance responsibilities are forcing them to modernize their legacy systems because their decades-old technology is incapable of handling the new requirements.

Further pressure comes from banks' steadily shrinking IT budgets in the wake of the financial crisis: Many institutions report a 20% reduction for 2013. They simply can no longer afford to maintain inefficient, costly systems. An estimated 80% of their existing IT budgets are consumed by running the bank, leaving meager funds available for innovative endeavors critical to remaining competitive.

Don Trotta, global head of SAP banking industry development, defines budget dynamics as both modernization catalyst and opportunity. "How to shift away from the internal, maintenance, and proprietary costs to adding more innovation, rather than just maintaining the old, is critical," he says. Modern systems remove complexity and cost from running the bank, freeing funds to bolster revenue-generating and loyalty-building initiatives.

INDUSTRIALIZATION BENEFITS

Trotta notes that software companies take business processes at the industry level, standardize them, and syndicate them across the industry so that everyone achieves cost reduction. Individual companies then leverage the tools to reap further gains.

Standardization has been around for decades, of course, but only recently has it been embraced by banking. Industries that were early adopters of off-the-shelf software are experiencing the lowest IT spend as a percentage of revenue.

INDIVIDUAL GAINS

Falk Rieker, global head of SAP industry business unit banking, spotlights the question increasingly asked by banks: "Can you help us transform our business model?"

Banks, he says, are asking because they've seen what SAP has done for other industries. That success across industries stems from SAP's focus on customers' business needs.

Through standardization, banks' middle and back offices experience a dramatic reduction in costs. Modern data-management tools enable them to compress and configure data. For example, in-memory computing reduces the amount of storage processing capability while increasing the ability to handle large volumes of data.

On the front end, new technology is providing better ways for banks to acquire and retain customers in today's customer-centric, multichannel environment. Replacing a system that no longer allows the bank to address risk and compliance with efficiency and agility is also an opportunity to introduce technologies that provide the insight or capacity to introduce new products or gauge their performance. Leveraging standardized tools enables banks to move away from being experts by product or channel type toward offering a one-source customer view across all channels and products. That means customers can interact and transact with their bank on their terms and receive consistent service and information across channels, including branch, mobile, and Internet.

Tremendous opportunity for innovation exists, says Rieker. Today's tools extend beyond core banking to include analytics, applications, mobility platforms, cloud-based offerings, and holistic solutions. Banks are using a mixture of these technologies in their transformational business initiatives.

WHY SAP

SAP is a strategic, innovative business partner with size, scale, and strength. We're a global leader with 3,700 bank customers in 120 countries. Our solutions benefit retail and commercial banking operations as well as capital markets. SAP delivers innovative standardized solutions that help reduce risk and cost and help propel growth.

MEET THE TOP 10

We asked the leaders of the top 10 FinTech companies what's ahead for them and what it takes to be a great tech boss

FIS 1

HQ: Jacksonville, Fla.
Frank Martire, Chairman and CEO

Frank R. Martire learned one of the most important lessons of his career in the 1970s, when he was in his 20s, working at Connecticut National Bank.

The chairman and chief executive of Fidelity National Information Services was then fresh out of Sacred Heart University of Fairfield, Conn., and exhausted after working all night on a project that he just couldn't complete.

The goal of the project wasn't important, but what he was about to hear from his boss was.

"I said: 'I did everything I could. I did the best I could and we just didn't get the project done,'" Martire recalls. "But he [answered]: 'Mr. Martire don't ever confuse [effort] for results.'"

That is now one of the guiding principles of FIS' business, which includes core processing among a broad suite of financial technology products.

"It's something that stuck with me throughout my whole career. I want to get results," Martire says. "The attitude of my employees to our clients is a reflection of me personally. Either we do it well or we don't do it."

It's a strategy that has served him well.

This year, FIS is number one in the FinTech 100, having racked up $5.7 billion in revenue in 2011, 87 percent of it from the financial services industry.

But FIS's business is constantly changing. On the horizon are managed services that the company plans to offer to banks. Those bank clients are having to compete with a host of potential disruptive competitors – including financial technology start-ups and expanding prepaid card companies.

"As we speak, the industry is going to have to get more efficient in the delivery of products and services," says Gary Norcross, FIS's president and chief operating officer. "With the increased burdens around risk, around fraud, around emerging competitors."

That will inevitably cause banks to outsource some of their systems. Norcross projects that by 2015, most banks, if not all of them, will be doing some sort of back office processing in the cloud.

Banks "are going to have to turn themselves more into marketing engines," Norcross says. "They are going to have to compete and drive, but because of these non-financial institution competitors, they'll have to really come into the market in a meaningful way," he says. "They are going to have to change the way that they do sales.... And financial institutions, unless they are in the top 50 in the world, they are not going to be able to completely manage their back office."

Martire says everyone at FIS is on-board for the change that's on the way.

Employees in departments ranging from sales to IT are on call to handle the needs of FIS's customers. That's why FIS only recruits from within the financial services industry. Martire pledges – individually, and to every one of FIS' customers – that anyone that leaves a message will get a call back in less than 24 hours, even if that call back is from him.

"What I can't guarantee to you is that we will never make a mistake," says Martire, who speaks in a hushed but stern tone. "But what I can tell you is I have zero tolerance for non-responsiveness."

–By Sean Sposito

> "The attitude of my employees to our clients is a reflection of me personally. Either we do it well or we don't do it."

2 Tata

HQ: Mumbai, India
N. Ganapathy Subramaniam, president, TCS Financial Solutions

Fresh off of a couple of big partnership deals, Tata Consultancy Services is wielding an expansion strategy that covers growth in new mobility and old school geography.

"We have to find new ways to grow," says N. Ganapathy Subramaniam. "[Banks] are saying, 'Can I have a clean balance sheet?' That's what they are looking at from a balance perspective, but they are also looking at regulatory issues, financial crime and mobility."

In July, the firm partnered with Century Link and Savvis to allow the TCS BaNCS suite to be offered on a cloud-enabled hosted environment in North America. The platform includes core banking, payments and anti-money laundering technology, as well as corporate actions and insurance. Savvis's IT infrastructure options include colocatoin, managed hosting and cloud delivery. TCS BaNCS includes a group of pre-configured customizable banking products such as core banking, payments, compliance, and treasury management.

Subramaniam sees a trend among financial institutions toward expanded use of managed service offerings as a way to free themselves from IT and application management chores and respond to developments in payments and mobility. "On the customer side, how can I improve the customer experience on things like iPhones, Pads, etc?" Subramaniam says.

TCS in April entered into a partnership with Mozido to expand that firm's enterprise cloud payment network. Mozido's mobile wallet platform will be integrated with TCS's mobile point-of-sale system and TCS Rewardz, a customer loyalty program. The mobile wallet technology will enable bill payment, remittances, mobile top-up and payroll deposit, as well as marketing, redemption and targeted analytics based on real-time transaction behavior. The partnership also includes the Mozido Mobile Vault, a real-time digital payment processing platform that's designed to improve cash handling. "Payments is one area where everyone wants to take a shot," says Subramaniam.

TCS seeks to compete with firms such as Infosys in a challenging economic environment for outsourcers. In its most recent financial statement, TCS said revenues grew 13.1 percent to about $2.72 billion, while net income increased 1.36 percent to about $604 million. The firm reported strong performance in banking and financial services, especially in U.S. and European markets. However, the firm also said foreign exchange volatility posed risks going forward.

Subramaniam says that as a leader of a large team of programmers and other technologists, it's vital to be transparent when linking discussions of economic performance to corporate strategy. "I think people understand the economic situation, and they are comfortable if, as a leader, you can look in their eyes and tell them what you plan to do," he says.

He also says the tech talent pool is changing, and that requires a management strategy that puts a premium on teaching multiple tech skills and providing a variety of tasks for staff.

"When I first joined the firm [more than 20 years ago], I grew up in a programming culture where you looked at one thing. Young people today are more comfortable with multitasking. If you give them only one thing they will get bored."

–By John Adams

Fiserv 3

HQ: Brookfield, Wis.
Jeff Yabuki, CEO

The development of new mobile banking and payment products remains Fiserv's top priority, as it was last year.

"The financial institution market is, as we all know, fairly challenged right now," Yabuki says. "We're putting a lot of focus on those products and services we can develop and deliver that help financial institutions generate more revenue, increase their efficiency, and build more loyalty within their customer base. Mobile is one of the ways we can do that; it's becoming an important part of creating loyalty and relationships while increasing efficiency by better extending the self-service channel."

Person-to-person payments are in "the first inning of what will be ultimately be a nine-inning game," Yabuki says. "P2P is an intriguing opportunity because it's the intersection of potentially the last bastion of check and cash payments – the roughly $11 billion in payments a year that are transacted among consumers, largely in check and cash."

In the fourth quarter of this year, Fiserv will introduce real-time person to person payments, the ability for people to move money to another individual's bank account immediately. "That is necessary to truly be able to take the place of check and cash," Yabuki says. "We believe that will provide some revenue opportunities for financial institutions."

The payments will ride on existing debit networks, including Fiserv's own Accel/Exchange, which supports 40 million cards. Point-of-sale transactions will occur as real-time memo debits and credits.

Today, it's not that easy to conduct complex transactions on a mobile phone because of all the typing on tiny keys required, he points out. "But to the extent you can auto-fill information and find other ways to allow people to more easily transact, there's almost no limit on what people can do," Yabuki says. Geolocation and the ability to combine different streams of information on a mobile device will provide new ways to bank from a mobile device, he believes. He expects Fiserv to roll out new products along these lines over the next six to eighteen months.

Such added convenience and capability calls for more security, he concedes. "I do think it raises the stakes on security and authentication, making sure that as you think about new transactional capabilities, security stays at top of mind and is integrated at the applications," he says. "If people don't feel secure, that changes the trajectory of usage pretty quickly. I think the industry is doing a good job of that and I've seen new authentication methodologies that are pretty exciting."

Another area Fiserv has been working on is integrating account aggregation with personal financial management. The company purchased CashEdge last year, which has an aggregation service called AllData.

How does Yabuki inspire, encourage, promote and execute good ideas?

"Isn't that the question of the day?" he says. Fiserv has increased R&D spending over the last several years, he says. "One of our five values is 'create with purpose' – what can we do to help solve everyday problems for our clients and their customers?

"It's also important, at least for me, to have our people understand they're part of something much larger than what they do," he says. "When someone is working on core banking or mobile or debit or ACH or risk, that's really important. But to the extent that it comes together and creates a unique experience for clients, that's where the win is.

"Having 20,000 people understand that they're part of something big and unique and is really changing the face of financial services, that kind of energy does a lot to make people be their very best and to take some risks and do everything they can to make their clients successful."

–By Penny Crosman

SunGard 4

HQ: Wayne, Pa.
David Hamilton, president, banks

What does it take to be a great tech boss?

"Patience," says David Hamilton, president of SunGard's banks business. To encourage and promote good ideas, Hamilton does something he calls "picking a fight" – not with a specific competitor or person, but with a market situation or problem. "If we can identify those challenges, that helps focus people's minds," he says. "Once you have people's minds focused, it's easy to fuel and encourage thinking and innovation."

He also talks to his team about providing software that has opinions. "Our customers don't want us to explain to them six ways they could solve their problem," he says. An example is a platform for mobile phone, tablet, and online applications that SunGard launched late last year called Ambit MyMoney, primarily in Asia and the Middle East. "In Asia, the lines between a person's personal financials and business interests are blurry," Hamilton says. "We wanted to enable our customers and their small businesses to have a more flexible engagement model with their bank."

The U.S. is a tricky market for SunGard lately. "A lot of institutions in the U.S. in our target market – the $3 billion to $40 billion-asset banks – are relying heavily on core banking providers for mobile and online channel access," Hamilton says.

U.S. and European clients have been cautious, due to budget issues and regulatory uncertainty.

Yet in the last six months, SunGard has launched a new software product for commercial credit lifecycle management.

Earlier this year, SunGard launched Ambit Concierge, an iPad app that customer service staff can use in the lobby of a branch to handle customers' financial and non-financial requests. "Somebody with an iPad could walk up to a teller queue and satisfy a customer who simply wants to transfer money from one account to another," Hamilton says. "We see a lot of those sorts of queue busting techniques in the branch lobby right now."

This fall, SunGard will announce Ambit Wealth Strategist, another iPad app that enables private banking and relationship managers to become more mobile.

To retain IT talent, SunGard lets people move around between projects. "Whilst they may be working on a tedious back office system, we want them to know that once that project is behind them, they can immediately move to an HTML5 project for mobile devices," Hamilton says. "I've put some HMTL5 developers on our, let's call them nostalgic transaction systems. At first they grimace, shrug their shoulders and say why me? But they come out of it having learned a great deal about what it takes to build a resilient, scalable product."

–By Penny Crosman

NCR 5

HQ: Duluth, Ga
Michael O'Laughlin, senior vice president of financial services

Pass Michael O'Laughlin's office at NCR headquarters, outside of Atlanta, and you might mistake it for a conference room. A large, round table – surrounded by six comfortable chairs, and a speaker phone – is there instead of the oak desk you'd expect.

There are no family photos. No ferns. None of the accoutrements you'd find familiar in any bosses' workspace.

"We are all sitting around this table," says O'Laughlin, NCR's senior vice president of financial services. "It's a meeting place for open ideas."

Out of those meetings have come some of NCR's biggest thoughts around bank branch consolidation.

They include mobile cash withdrawal, which allows an ATM user to take out cash from an automated teller machine without a card and PIN number. The technology relies on smartphones to relay pre-staged transactions.

They also include video ATMs; NCR's

> O'Laughlin struggles to talk about himself. He's not that kind of guy. "It's more about processes, people, and then technology. How it all comes together."

Aptra Interactive Teller is designed to extend bank branch hours by allowing a teller to talk face-to-face with a user at the ATM through a camera and a screen.

Earlier this year, NCR bought an undisclosed minority stake in uGenius Technology, the company the ATM maker collaborated with to launch this special device that features a built-in camera. Tellers can also remotely control these video-equipped ATMs.

In August, FirstOntario Credit Union, based in Hamilton, became the first Canadian financial institution to deploy the NCR Aptra Interactive Teller, to let members bank after hours.

This is the work O'Laughlin is most excited about.

"Interactive teller [is part of that], a kind of a first step in that direction, and mobile deposit withdrawal," he says. "You are going to see some other things in the near term that I'm very passionate about."

Indeed, he's seldom at home.

In late August, O'Laughlin took a five-day tour of India where he met with NCR sales employees, and politicians, in Mumbai. He also visited several other Southeast Asian cities.

In September, NCR acquired Transoft International of Cary, N.C. in an effort to bolster its cash management software services. NCR will integrate Transoft's product suite and employees into its financial services line of business. NCR believes the cash management segment is worth about $1 billion, industry-wide.

Also in September, NCR and VendorNet completed the integration of the VendorNet StoreNet In-Store Pickup fulfillment technology with NCR Advanced Store point-of-sale software. This accommodates online-only retailers that want to provide "locker" type pick-up locations to serve the growing number of shoppers for whom work or home delivery is impossible or inconvenient. One driver of this type of service is the fact that companies are increasingly implementing policies against employees receiving non-work-related packages at work, eliminating for many online shoppers the main avenue for ensuring quick and secure delivery of online purchases.

Back in Atlanta, O'Laughlin struggles to talk about himself. He's not that kind of guy. He's the type of boss that would rather talk about his employees' accomplishments.

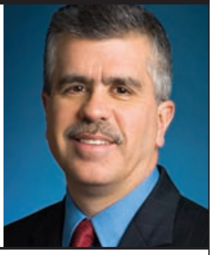
That's just how he likes to lead.

"It's [more] about processes, people, and then technology," O'Laughlin says. "How it all comes together."

–By Sean Sposito

6 Diebold

HQ: North Canton, Ohio
Thomas W. Swidarski, president and CEO



> "Making sure we aren't so blinded by something that we call an ATM that we miss the forest for the trees. This is the biggest step for me."

Thomas W. Swidarski knew he had to change his ATM game soon after he was named the chief executive and president of Diebold in 2005.

The pace of technology was quickening. Financial technology start-ups were just beginning to pop up. The potential to disintermediate was there. And he knew, deep inside, that what his company had to concentrate on next was what it knew best.

And that is, "every aspect of what happens in an ATM network, whether it's a Diebold unit, or not… Whether we do the software or someone else does it," he says. "We understand the whole ecosystem."

That realization led him to one conclusion: Why not just handle a bank's ATMs for it?

Roughly a year after becoming Diebold's captain, he took one of his head salesmen off of some of the company's largest accounts and started hunkering down and talking to customers.

Indeed, by 2009, the company had signed $75 million worth of contracts with its managed services business, doing all the back office processes and monitoring a bank needs to do to manage its ATMs.

A year later, Diebold inked roughly $150 million worth of those deals, and last year it grew this business to about $600 million.

Earlier this year, Toronto-Dominion Bank handed over the reins of its roughly 4,400 ATMs to Diebold. The company is monitoring those ATMs remotely with its OpteView Resolve software – as well as tending to those devices on the ground with its employees.

And just last month, the North Canton, Ohio company announced that it was opening up two new data centers located in Richardson, Texas and Manassas, Va. Previously, the company was handling its managed services out of three data hotels near its headquarters.

Some of the first Diebold customers placed in those new data centers – one of which is located directly on Verizon's fiber optic network in the Lone Star State – went live in September.

Also in September, Diebold acquired Gas Tecnologia, a Brazilian internet banking, online payment and mobile banking security company that protects nearly 70% of the country's internet banking transactions. Diebold hopes to expand its Brazilian footprint.

Today, especially in the U.S. market, Swidarski says, it's all about ATMs.

"But, in the future you can be doing things on handheld devices, or tables," he says. "I want to be able to participate in that, and help the company thrive as the world changes."

Focusing on this aspect of financial services will give Diebold a future, Swidarski says.

"Making sure we aren't so blinded by something that we call an ATM that we miss the forest for the trees," he says. This is "the biggest step for me."

–By Sean Sposito

First Data 7

HQ: Atlanta
Mark Herrington, executive vice president of global product management and innovation

> "We're operating with a sense of urgency. If you're going to fail, fail fast."

From his perch at the center of the fiercely competitive payments game, First Data's Mark Herrington can't help but be amazed at other leaders who exert a sense of calm amid a storm of combatants.

"Mike Krzyzewski [Duke's basketball coach] seems to be a tremendous game planner, and has a very calm way about him. He also comes across as a humble guy, and that's an important part of leadership," says Herrington, executive vice president of global product management and innovation for First Data.

Herrington's the "Coach K" for a team of 1,000 people who produce new digital payments tech for First Data. "For the next two to three years you will see a slugfest with a lot of value added products," he says, adding that "at some point we will need to see an environment where these services can be consumed in a ubiquitous fashion."

First Data, which processes payments for more than six million merchants and thousands of credit card issuers, believes it's uniquely positioned to take advantage of the coming payments revolution, as wallets, cash and credit cards morph into a mobile-phone enabled portal for shopping and payments. The Atlanta-based firm is already providing the processing rails for the Google Wallet, and is turning its attention toward developing additional mobile and web-friendly digital payment products for merchants and consumers.

"We're seeing consumers empowered in a way that they haven't been in the past. They have so much access to so much information where they can quickly find a merchant that they want," Herrington says.

The slew of new payments tech development comes partly under the umbrella of First Data's Universal Commerce strategy, under which the company produces tech tools for digital payments, integrates disparate applications, provides intelligence for shopping and deals, connects stakeholders, and enables computing devices to execute fast and compliant payments. Mobile delivery is the hub of the model.

A number of new products have spun off of Universal Commerce, including the FD35 PIN Pad, which allows PIN-based debit transactions and swipes traditional payment cards, but also can accept chip and PIN (EMV), contactless cards, mobile payments and key fobs.

Snap! is an iPad app for generating paperwork and collecting electronic signatures so merchants can begin accepting payments quickly. Otherwise is an open platform that lets marketers and other publishers electronically attach offers such as deals, e-coupons and loyalty programs to a consumer's cards or mobile wallets.

The company has also rolled out RapidComply, a self-assessment questionnaire and vulnerability scanning tool that helps merchants maintain Payment Card Industry Data Security Standard compliance. And it's launched Global Gateway e4, an online payment service.

"We have a good share of the merchant community and are putting in place tech to allow any combination of form factors at the point of sale," Herrington says.

"We're operating with a sense of urgency. If you're going to fail, fail fast," Herrington says.

–By John Adams

8 Cognizant

HQ: Teaneck, N.J.
Francisco D'Souza, president and CEO

Outsourcing firm Cognizant has been growing fast and makes its debut in the FinTech Top 10 this year.

"When we started the business 19 years ago, we saw a very large market opportunity ahead of us and made a conscious and deliberate effort to capture it," says Francisco D'Souza, president and CEO. "We've orchestrated and engineered growth into the business strategy of the company from day one. We created a financial model that lets us reinvest back into the business for long-term growth to make sure the products and services we offer our clients stay ahead of where our customers are and where the market is."

While some outsourcers see a movement of U.S. banks' work from overseas to the States, D'Souza does not.

"Our clients are always looking at the equation of, where in the world does the right combination of cost, capability, and talent exist to do a piece of work," he says. "In the IT portion of our business, the reality is there isn't enough talent in the U.S. and Western Europe to meet our clients' demands. The talent production in the U.S., if you look at the number of college graduates and so on, is not keeping up. Clients who want to remain competitive in the global market need to tap talent around the world." Cognizant has delivery centers in the U.S., Europe, Asia, and South America. "Our goal is to find the best talent in the world and bring that talent to bear on a particular problem," he says.

India and China have the largest tech talent pools, he notes. "We see eastern Europe being strong in pure computing statistics and mathematics. We have centers in South America that bring that time zone and the Spanish language to the table." On the business process outsourcing side, the Philippines is a significant contender, he says.

Cognizant's road map for the next 18 months is focused on the "smac stack" – social, mobile, analytics and cloud. "We think there's still a lot that can be done to maximize the impact of these technologies," D'Souza says.

How does he see new ideas through? "The challenge we faced was how to identify, incubate and protect new ideas that have great potential but take time to come to fruition and contribute meaningfully to revenue," D'Souza says. "We encourage employees not just to give us ideas but to form teams to execute these ideas. The emerging technologies organization reports directly to me so I can give it the air cover it needs to grow and operate with autonomy and independence, which is needed to shepherd new good ideas."

–By Penny Crosman

NRI 9

HQ: Tokyo
Shin Kusunoki, senior vice president and division manager for financial and asset management solutions

For Nomura Research Institute, attracting and retaining top tech talent is a matter of giving them something they can sink their teeth into.

"We motivate technologists by assigning more and more challenging projects," says Shin Kusunoki, a senior vice president and division manager for financial and asset management solutions in NRI's financial technology solutions division.

NRI, which gets about 60 percent of its revenue from financial IT solutions, including banks, asset managers, broker-dealers and insurance providers, has a number of new projects underway to serve a customer base that includes Credit Suisse, Barclays, HSBC, UBS, JPMorgan Chase, Nomura, ING and Mizuho. NRI's solutions support about 80 percent of the Japanese mutual fund market and are used by about 70 percent of the participants in the Japanese capital markets system.

Two of NRI's largest current initiatives involve expanding its Japanese base to include more smaller bank clients, and growing NRI's presence in India.

NRI recently finished work on a new hosted online banking system that will be aimed at Japan's 106 regional banks. In addition to internally hosting online banking within NRI's own data center, the new online banking service will also come with customized advertising and marketing campaigns.

Outside of Japan, the firm established NRI FT India in Kolkata following the completion of its acquisition of Anshin Software. The new unit will offer customer support, IT services, financial services R&D and software development, and includes about 200 new system engineers. Kusunoki also says NRI's current priority is to assist Japanese financial firms to expand their businesses outside of Japan, but is also seeking partners for a U.S. expansion.

NRI is working on new developments in mobile channels and researching how to leverage Oracle Exadata for a multitenant platform as a service model. Oracle Exadata is a package of servers, storage, networking and software that is designed to consolidate tech systems, provide data warehousing and online transaction processing.

The execution of these initiatives is reliant on finding IT people with knowledge of these new technologies and keeping them happy. Kusunoki says that in Japan, most people work for one company in their careers.

NRI recruits heavily from local universities in Japan, China and India, and provides chances for staff to transfer to other jobs, as well as collaborate on new ideas for products, tech or strategy.

As the firm expands further outside of Japan, Kusunoki has to work harder to encourage the cross-job skill sharing that it offers developers. It has an annual off-site event in which tech staff from the firm's different divisions share ideas and experiences.

–By John Adams

10 Infosys

HQ: Bangalore
Mahesh Makhija, vice president

As Infosys plots its expansion strategy following the tech spending slumps of the past few years and stiff competition from firms such as Tata Consulting Services, it's offering expanded outsourcing options. These new services range from social media to the cloud to expanded back office functions such as human resources.

But more than that, Infosys is attempting to compete in a new era for outsourcing, in which jobbing out specific functions for scale and cost cutting gives way to a mix of tech hosting, assessments, advisory services and management.

"Outsourcing is no longer about transaction processing, but a bank's leveraging a global workforce for a tech strategy," says Mahesh Makhija, vice president and head of the financial services and insurance practices for the Americas for Infosys.

Infosys is hoping its expanded advisory, management and hosting options will help the outsourcing firm benefit from the complexity posed by IT pressures on banks that include risk and compliance mandates, customer acquisition challenges and budget pressures.

Makhija notes that tech strategies don't look the same for all institutions. "There is a ton of jargon in tech, and not everyone wants to be on the most bleeding edge of technology. Some banks want to move more aggressively into social media, for example, while others are more conservative."

Infosys uses a variety of techniques to marry a bank's demand for new tech with its business requirements, such as consulting and maturity models that measure the institution's development cycle and how that cycle may impact its business objectives. The firm is also focusing on hosting entire business units. "We have designed a set of platforms that take a core function like HR, and we host the entire function in our data center from recruitment to retirement. It's starting to move into other core units," Makhija says.

Other new developments include a new infrastructure testing service, in which companies can test the business readiness and performance of their IT infrastructure during major changes such as data center consolidation, virtualization and other tech upgrades. It also launched the Infosys Cloud Ecosystem Hub, which allows firms to create, adopt and govern cloud services. The hub includes a decision-making tool that leverages more than 20 parameters such as quality of service, technology compatibility, regulatory compliance needs and total cost of ownership.

Infosys' adjustments have not caused the economic pressures to fade entirely. Barclays Capital's equities researchers in late August downgraded Infosys from an "overweight" to an "equal weight" saying the firm was missing guidance and possibly underestimating risk. Infosys reported $0.73 per share for the most recent quarter, missing the consensus estimate by $0.01.

Makhija says that when dealing with economic challenges, Infosys has adopted a strategy in which the nature of the challenge, its impact and how the business is responding is communicated to each staff member. He says in such cases consistency and transparency of the message and plan is important "so even programmers will hear the same message from their immediate manager."

–By John Adams

Why Upgrade Now?

A flurry of core processing upgrades and conversions have taken place around the country. Behind the activity: a drive for efficiency, compliance and competitiveness

By Penny Crosman
Photography by Tim Knox

Through late August and most of September of this year, First Community Bancshares in Bluefield, Va. maintained an online "countdown" to its core conversion at www.fcbupgrade.com. (At press time, there were 23 days to go). The site features a video with soothing piano music in the background, in which CIO Steve Lilly touts some of the benefits of the new core system being adopted, Jack Henry's Silverlake. "It will allow us to provide big-bank capability in the community banking style you prefer," he says.

Lilly wasn't crazy about performing in the video. "I'll tell you what, being chief operating officer is what I need to stick to," he jokes. "I don't believe my acting career is going very far. I'm doing the best I can to get the message out."

Banks rarely offer public announcements about their technology upgrades until after they're done, for fear of glitches that could cause errors, delays and outages. But at $2.8 billion-assets First Community, "We feel like they have a right to know, particularly with the new internet banking solution that's going in," Lilly says.

The new system would require customers to re-establish their online banking credentials. "We figured it would be unfair to spring it on them," he says.

First Community Bank is part of a wave of banks that have engaged in core banking transformations over the last year or so.

"Historically, transformations in the U.S. and Europe have stood at around 1-2% – considerably lower than the rest of the world," says Celent analyst Stephen Greer. "Currently, we're seeing that number rise to around 4-5%. It's not considerably higher this year, but considering how many banks there are in the U.S., this represents a lot of banks." These numbers are based on Celent's estimates and conversations with clients, he says.

A quest for improved efficiency is one driver behind this conversion. The bank's efficiency ratio – the amount it spends to make a dollar in revenue – is currently at about 57 cents per dollar, or 57%. Industry averages hover in the high 60s. "Our goal is to get it as close to 50 as we practically can," Lilly says.

Compliance issues were another driver of this project. "Monitoring compliance, making sure we got it right and that we were able to satisfy regulators, continued to be based on manual processes rather than trying to stitch databases together to get the information in the right places at the right time," Lilly says. "It's been one of our bigger headaches. Another has been our debit card processing, there's been a lot of manual process in getting a Visa card in the hands of our customers."

Also behind the change was the fact that the bank's IT staff was spending a lot of time writing and customizing code to get external modules, such as online banking, bill payment and debit card processing software, to talk with the incumbent core system (Fiserv Signature). The bank has two developers. "They're very good and talented," Lilly says. "Our philosophy here is we don't want to run a development shop, we want to run a bank."

The just-completed conversion was conceived five years ago, when a technology assessment revealed the bank had too many manual processes. "As we started looking at that, we structured all of our major IT contracts to be coterminous in September of this year, in order to search for the best technology we could afford that provided best integration and the highest degree of automation that we could find," Lilly says.

A post-conversion feature CEO John Mendez is looking forward to is a one-signature account opening process. "Our account opening process could span 15-30 minutes depending on the type of account, sometimes longer. We're converting to a system that will populate all the necessary applications and we'll also be using electronic signatures as we image those deposit documents."

Customers will be able to sign up for an account, online banking, bill payment and mobile banking through one paperless application. There will be fewer FedEx packages between the bank's headquarters in Bluefield, Va. and its 72 branches, which are up to 350 miles away. Compliance with anti-money laundering, Regulation DD, Regulation CC, and other rules will all be handled by the software.

"We feel that's very important in this day and time to achieve compliance but not to impose it on our customers to the point where it's offensive," Lilly says.

Over time, the bank will evolve into iPad-based account openings and paperless branches. Branch staff are "elated" about the new system, Lilly says. "They've already done some testing, it will make life in the branch a lot better so that we can spend time talking to customers about important things that matter, as opposed to creating a paper chase," he says.

Certain HR functions have already been made paperless. "We want to expand on that," Lilly says. "We also have a trust division and I think there's a great deal of potential there as well as in compliance and risk management. We'll migrate all those departments to paperless as soon as we can."

A new native mobile banking app for iPhone, Android and BlackBerry devices that's part of the upgrade "will be a quantum leap for our customers" from the mobile browser the bank has had so far, Lilly says, including text messaging and bill payment.

In the Bluefield metro area (population around 60,000), local competitors include BB&T and several community banks.

BB&T is a formidable competitor, particularly in the cash management arena for business customers, Mendez says. Silverlake includes support for commercial cash management. Jack Henry also has an iPad app for small businesses that helps them run their business from their iPad "anywhere, at any time," Mendez says.

CITI'S GLOBAL CORE CONVERSION CHUGS ON

The largest core conversion project in the U.S. remains Citi's, which the bank says is meant to improve customer service and support. It is due to be completed in 2013.

The project is a multi-year effort to develop a single, customer-centric banking platform that will span all channels and consumer products in North America Consumer Banking, according to a Citi official. "Our customer support and sales experts will benefit from a streamlined application environment and can more easily extend consistent service across all channels," she says. The platform is reportedly FIS' Systematics.

The overall core platform project is global. Each of Citi's four regions is approaching the project in phases. Southeast Asia is complete, for example, and in the U.S. the bank has completed the first of several phases.

Project Rainbow, as the project is called internally, began in South East Asia. "We first used the Rainbow name due to the seven initial countries that came together onto the common platform to create something truly magnificent," the official says.

When this project has been completed, Citi "will be able to give consumers more personalized solutions and a consistent client experience whenever and wherever they interact with Citi, whether online, in a branch, through a call center, on a mobile device, or at an ATM," the

"We're looking forward to those enhancements."

The bankers expect the new system to provide stronger security. "I won't be specific there, but we're going to see a much tighter and more manageable security environment because we're dealing with one vendor overall as opposed to several," Lilly says. "We won't have to oversee as much as we have to today."

The bank is retaining its check processing platform. "We like it, we've had it since 1997, and it has evolved," Lilly says. "It made no sense for us to change it."

First Community has also purchased Jack Henry's Synergy imaging and workflow system. "We feel we can leverage that considerably across the enterprise, not only for deposits and loans but for a number of other functions within the company," Lilly says.

Data validation has been critical to this project. "You are taking over 300,000 accounts and moving them from point a to point b, the potential for things to go wrong is very high without meticulous data verification and making sure things convert and end up on other side of the fence the same as they were before they traveled," Lilly notes. "It is a very meticulous, time consuming process to make sure those are right because you have thousands of codes, hundreds of thousands of accounts in the customer information file. There's a lot of diverse information within our data."

Another complication is that First Community acquired People's Bank of Virginia in Richmond at the end of May and was going to convert that bank's IT to the Jack Henry platform over the same weekend. (People's was using an FIS system before.)

All in, include investments in storage and signature pads, the bank has spent $3.6 million on this conversion. The return on investment for the project is around 21%, based on reduced cost of processing transactions.

spokesperson said.

Critics have slammed Citi for going with a batch processing, rather than a real-time transaction system. But the bank's more ambitious goals may be around customer analytics, for which it recently purchased IBM's Watson.

In a press release in March, the bank said it "will assess ways to use a first-of-a-kind customer interaction solution combined with Watson's deep-content analytics, natural language processing, decision support, and evidence-based learning to continue to advance digital banking." With 200 million customer accounts in more than 140 countries, the bank has a wealth of consumer data to mine.

TURNING IT INTO A PROFIT CENTER

Up until a year ago, Chan Desai, CIO of Team Capital Bank, was relying on what he calls "bank in a box" - a hosted service with one vendor providing everything for the bank's IT. Team Capital, which is based in Bethlehem, Pa., is a de novo that started in 2005. "There was no IT, there was no back office – there were the investors and an idea," Desai says. At the time, the all-in-one solution from Fiserv made sense.

But by 2009, it became clear to senior management that at the rate the bank was growing, the existing technology wasn't going to carry it into the future. "The problem with a bank-in-a-box approach is you get everything from one vendor, and that really limits you when you're looking for a certain type of mobile banking or social media [product]," Desai says.

"We wanted a strong core platform and the flexibility to make decisions as our needs change down the road, so we can swap something out that's not working and extend something that is working," he says.

The now $900 million-assets bank came up with a short list of vendors – Fiserv, Jack Henry and Open Solutions – and conducted a shoot-out. "We wanted a vendor that would not only allow us to keep our operating costs low but continue to reduce them," Desai says. "I know that's asking a lot.

"This was a huge deal for us, because we weren't just looking to replace the core, but also our merchant capture system, our online banking system, our business online banking system, our data warehouse system, our enterprise reporting system, our wiring system, and our ACH platform," he says. "This was a complete overhaul of the technology layer." Ultimately the team chose Open Solutions. The project began in April 2010 and went live Feb. 2011. One unusual element: no additional IT resources were summoned for the conversion.

"Most conversion projects require additional overhead," Desai says. "We had the right team of people, all wearing multiple hats. Also, there was support from a strong project management team from Open Solutions."

The bank is running the hosted option of the software; it's paying to run everything out of Open Solutions' Cherry Hill data center. "Because we went with best of breed, not all the apps we use are from Open Solutions, there are third-party apps in the mix as well," he says.

Desai hopes to make money off the new system by building add-on applications that work with the Open Solutions core platform and selling them to other Open Solutions customers.

"A lot of community banks look at their back office as a cost center," he says. "We wanted to go to that next level of transforming ourselves into a profit center."

In the past year and a half, Desai, another developer and a new hire have built about 15 commercial-grade applications using Open Solutions' DNACreator.

"There's been tremendous interest from clients in some of our products," Desai says. A credit union in Hawaii has already bought one.

The applications the bank is building also are meant to help internally, to eliminate operations costs wherever possible.

Desai's group recently created an ACH origination platform that automates formerly manual ACH processes. "It's a lights-out process, nobody has to do anything," Desai says. "The app validates the file, customer, and limit; it generates exceptions and exception emails; there are approval links attached to the emails, somebody in authority for that customer has to approve those."

These development projects have moved quickly. "These are not eight-hour days, we put a lot of sweat equity into building all these applications for our bank and turn around and market them to other clients of Open Solutions," Desai says.

"Our ulterior motive is to turn our IT operations into a profit center." ■

FINANCIAL TECHNOLOGY SANS FRONTIERES

PAYMENTS, COMPLIANCE AND MOBILITY SPELL BIG REVENUE IN ALMOST EVERY CORNER OF THE WORLD. FOR FINANCIAL TECHNOLOGY PROVIDERS LOOKING TO HIT TOUGH EARNINGS TARGETS IN A FIERCELY COMPETITIVE ENVIRONMENT, GROWING MARKETS IN ASIA AND THE U.S. ARE AN ENTICING TARGET. U.S. TECH FIRMS WOULD BE WISE TO BE ON GUARD.

Like a lot of executives at tech firms based outside the U.S., Shin Kusunoki is seeking a path that leads to IT back offices in the States, and the big client wins that can result. But that path isn't easy.

"In order to get into the U.S. market, we feel we need a partnership with a local company," says Shin Kusunoki, a senior vice president and division manager for financial and asset management solutions in NRI's financial technology solutions division.

The Tokyo-based NRI does most of its financial services business in Japan, but is expanding into other parts of Asia and India, and, as Kusunoki mentioned, is seeking possible partners for U.S. expansion.

NRI is not nearly alone, as almost all of the major technology firms outside the U.S. look to expand or move inside the U.S. in a larger way. From the big outsourcers like Tata Consulting, which has inked a North American partnership to deliver broader cloud capabilities, to core banking providers like Temenos, which has long sought to bring its T24 solution to American banks, most of these firms have established a firm beachhead in the U.S. And they're now looking for more as American banks scramble to follow new rules, adopt new mobile channels and migrate to new digital payment models.

Examples abound. Ingenico's purchase of the U.S. portion of Hypercom suggests the Paris-based payments firm has its eyes squarely on VeriFone's lunch. When the Paderborn, Germany-based Wincor Nixdorf looks at the U.S., it sees a chance to make big waves in branch automation as American banks look to streamline branches through strategies that remove paper and bring about other efficiencies. And like all American bank IT shops, the London-based Misys – which already provides a suite of treasury and capital markets systems in the U.S. and other markets – hopes to cash in on the Dodd-Frank frenzy, introducing a new risk and regulatory product line designed to tackle the tough, still developing, U.S. regulatory overhaul. Misys's acquisition by Vista Equity Partners, which includes a merger with risk management provider Turaz, should provide more ammo for risk and compliance efforts in the U.S.

Of course, the U.S. isn't the only market targeted by international IT firms. Opportunities in the EMEA region abound, and large U.S. bank tech firms such as Fiserv and FIS also have vigorous international expansion plans of their own.

In the following profiles, we take a closer look at Wincor Nixdorf, Misys, Evry ASA, Ingenico and Temenos, and the stories of their plans for local and global expansion. *–By John Adams*

TEMENOS

In a June report, Forrester Research ranked Temenos Group AG (TEMN) as one of the top global banking platform vendors with an excess of 35 deals done in more than six global regions in 2011. Only five of these were in North America, the majority closing in Europe and Asia/Pacific.

The Geneva-based firm competes with the likes of Oracle, Infosys, and SAP to sell banks a platform that includes core banking, mobile banking, branch solutions, and risk management. The heart of this platform is T24, a service-oriented architecture (SOA). "T24 comes with a huge set of parameters," says Jost Hoppermann, vice president, banking applications and architecture at Forrester Research in Cambridge, Ma. "By changing the parameters, customers can change the user interface, workflow, protocol for dealing with currencies, and organizational structures, all without changing the source code."

There are currently about 560 installations of T-24. "These are mainly universal and retail banks," says John Schlesinger, chief architect at Temenos.

Temenos is rolling out Enterprise Frameworks Architecture (TEFA), which Schlesinger says will be complete in about three years. "Right now a typical T24 installation has about 50 user interfaces," Schlesinger says, "but at JP Morgan Chase it is more like 4,800 interfaces. The TEFA data framework will make T24 much more scalable in environments like this."

TEFA is also designed to facilitate integration with third-party products such as the PWM (private wealth management software) Temenos acquired in 2010 with the acquisition of Odyssey Group SA, a Luxembourg firm. "Odyssey is still not fully in line with T24," Hoppermann says, "and, while TEFA looks like a nice architecture, I haven't seen enough of the details yet to evaluate whether or not it can do this kind of integration."

Aimed more at smaller customers is the Temenos Model Bank, an accelerator designed to speed up implementations. "It (Model Bank) is essentially a 'bank out of the box,'" says Hoppermann. "New and existing customers could implement quickly and then modify. Most banking platform vendors are trying to build accelerators like this." *–By Mark Leon*

INGENICO

Already one of the largest makers of point-of-sale terminal hardware in Europe, Ingenico is moving aggressively into services, mobile payment systems, and the U.S. market.

The Paris-based vendor's acquisition in 2009 of EasyCash, a German payment services company, seems to have paid off. "Ingenico saw a 28% growth in its services revenue last year," says Rachel Hunt, head, EMEA (Europe Middle East Asia), IDC Financial Insight. "This partly offset a decline in hardware sales."

Ingenico and U.S. rival VeriFone are almost neck and neck in reported 2011 revenues with Ingenico coming in just under, and VeriFone slightly over $1.3 billion. Hunt estimates that fifty percent of Ingenico's business is in EMEA, but the company's acquisition last year of the U. S. portion of Hypercom signals a strong intent to compete more vigorously on VeriFone's home turf. "Going forward, Ingenico may have an advantage in the U.S. migration to EMV cards, due to their depth of EMV experience in Europe," says Hunt.

In February, Ingenico acquired a controlling interest in ROAM Data, a rival of Square that makes systems to turn tablets and mobile phones into POS devices. "We have seen a rapid shift in the last eighteen months to mobility," says Christopher Coonen, executive vice president, global sales, marketing and strategy for Ingenico.

Ingenico also makes its own mobile payment device dubbed iSMP, a sleeve that converts an iPhone or iPod Touch into a POS terminal that accepts EMV, magstripe, and non-contact payment cards.

The bulk of the business for both Ingenico and VeriFone is still in traditional POS systems for banks, retailers, and merchants, according to Hunt, who estimates that mobile accounts for less than two percent of cashless transactions. But, she adds, the trends are clearly in the direction of mobile payment. "NFC (Near Field Communications), particularly if Apple, as expected, releases an NFC enabled phone with mobile wallet attached could be a game changer." *–By Mark Leon*

EVRY ASA

In 2010, two Norwegian IT financial services firms, EDB Business Partner Holding AS and Ergo Group AS, merged to form EDB ErgoGroup, now renamed Evry ASA and based in Oslo. The company remains focused on the Nordic market but dreams of a more global presence.

"We have a lot of customers in the U.K.," says an Evry spokesperson. "Our Indian subsidiary, SPAM (Sweden Poland America Norway), has a healthy business in American bank and card services."

Evry's preferred development platform is Oracle. Like most service companies, Evry also competes with Oracle Financial Services for customization and integration. It has similar relationships with IBM and SAP.

The intellectual property that is Evry's core business was developed for the Norwegian market where banks historically have invested with a 15-20 year lifecycle expectation for financial software solutions. Part of the company's strategy to go more global is to reduce time to market for new functionality so customers can be more business focused.

While Evry is not a platform vendor, the lines between the services it provides and the software that support them is often blurred.

Choosing a services company such as Evry is very different from going with a platform vendor such as Temenos.

"Both approaches have advantages," says Jost Hoppermann, vice president, banking applications and architecture at Forrester Research in Cambridge, Mass. "A platform vendor will likely provide a more out-of-the-box solution. A services firm like Evry will likely do a custom-built integration. Which option a bank chooses depends on requirements and cost, and corporate culture; that is, the willingness to change business practices at a detailed level."

Evry is feeling the squeeze from SEPA (Single European Payments Area), which requires EU countries to make international payments on the same cost basis as domestic. Another driver of innovation and cost containment is increased competition particularly from Asia as Indian giant Tata shows itself more in European markets. *–By Mark Leon*

MISYS

London-based Misys claims 1,800 customers in 120 countries. Its customer list includes 47 of the world's 50 largest banks and 13 of the top 20 asset managers, according to the company.

Vista Equity Partners announced June 1st that it had acquired Misys and merged it with Turaz, which sells Kondor+ risk management software. Other key software packages provided by Misys include Summit FT, a treasury and capital markets system that specializes in derivatives and structured products for global investment banks, and Loan IQ, a commercial lending system used by 15 of the top 25 syndicated loan book runners. The Misys business serves four main verticals in the U.S., with dedicated experts within each segment: capital markets, commercial lending, banking and the buy side, says Rick Salk, Misys's North America sales director.

Adding Turaz strengthened Misys's risk management and front-office capabilities, he says. Misys has had "significant client expansion" in the U.S. with its Summit and Loan IQ software packages, according to Salk. In 2011, the company had 28 "new name" sales across its various businesses.

In the U.S., more banking clients are looking to consolidate their systems to reduce operational costs and increase return on investment, and more are investing in fee generation businesses, he said.

"Misys is uniquely positioned in the market (because) we can provide multiple solutions to our clients, as well as integrated best-of-breed cross-asset solutions," Salk says.

For its U.S. customers, Misys has created new risk and regulatory solutions to meet the requirements of the Dodd-Frank Act. The company has also introduced a client portal that works with its major products and allows Misys Loan IQ to support mid-market lending, complementing its syndicated lending capabilities. *–By Keith Button*

WINCOR NIXDORF

Paderborn, Germany-based Wincor Nixdorf Inc., which provides hardware and software solutions for banking and retail industries with a focus on improving customer service and reducing costs for branches, is in the same boat as a number of large firms as it navigates a tough international economic climate.

Wincor Nixdorf is projecting earnings before interest, taxes and amortization of about $127 million for the fiscal year ending Sept. 30, 2012, following EBITA of about $207 million for the previous fiscal year. This projected drop in operating profit includes a $51 million charge for an extensive restructuring that will cut more than 500 positions from the company's 9,200-employee workforce, mostly in Western Europe. Half of the cuts are to be completed in the current fiscal year, and half in the 2012-2013 fiscal year.

According to the company, the goal of the restructuring is to substantially strengthen its global competitiveness and target business activities faster in emerging markets. Oliver Weber, CEO of Wincor Nixdorf U.S., says the restructuring will benefit the company's U.S. business, because it aims to allocate research and development investments into markets with the biggest growth opportunities.

"We have invested in the build-out of our sales, service and operations organization in the last (several) years and we will continue to do so," Weber said. "Since the U.S. market represents a very attractive growth opportunity for us, we expect positive results from these investments."

Besides new deposit automation technology, the next wave of modernization will include consolidating deployed technologies to completely remove paper from the branch, Weber says. This will improve sales and service at the branch level while driving down costs. *–By Keith Button* ■

How to Manage Vendors in the Public Cloud

By Jeanne Capachin

Banks are moving away from having direct control over their technology assets to increased reliance on managing technology through contracts.

As banks move to public cloud providers, they are recognizing that procuring cloud services may require a shift in contract negotiation and vendor management. Buying public cloud services moves software and processing environments into the realm of commodity services – providing much less room to negotiate contract terms and service level agreements.

Most bank technology organizations use traditional technology procurement practices. But with cloud, the contract is for use of pre-established commodity services. With commodities, margins are slimmer, customization doesn't occur and there is little room for negotiation. The recent FFIEC statement on external cloud computing shows that U.S. regulators are aware that banks are contracting with cloud providers, but little guidance is provided. The bottom line from the FFIEC is that financial institutions should use the same approach to cloud computing that they currently use with traditional outsourced technology. This is good as far as it goes, but there are some best practices we have compiled from our discussions with banks and providers. Following are a few points to consider and discuss with legal counsel and your procurement group.

Human error – whether true mistakes or those that have been coaxed along with social engineering – are among the biggest risks in any processing environment.

• Security and data protection. We have to start with security as that tops every bank's list of concerns about public cloud. Unfortunately though, banks often focus in the rear view window as they review providers' security controls. Providers tell us that banks are overly focused on physical security, while paying much less attention to more common attack vectors. This is probably due to an over-reliance on leveraging the same kinds of controls the bank uses to manage its owned assets. One common question that is missed is about how the provider controls access to backup data and disaster recovery. Banks will tour primary processing locations, but will often not use the same diligence when probing the provider regarding the complete data life cycle. Providers should offer details on where back-ups are stored, how chain of custody is tracked, how data is secured in transit, and how retired assets are wiped clean after assets are re-deployed or after data retention time periods have been met. Banks must also consider the geographic locations where all data will be kept at rest or in transit, and ensure that there are no conflicts due to legal jurisdictions.

• People. In addition to making sure that data is protected, banks must also ensure that the provider has well-trained staff. Human error – whether true mistakes or those that have been coaxed along with social engineering – are among the biggest risks in any processing environment. All staff from operators to executives must be trained to be vigilant so that they can recognize attacks underway and not fall prey to rapidly evolving techniques. IDC Financial Insights has yet to find an easy way to measure this capability, as it's more about the culture of the provider than about checking off boxes with training programs. This is where bankers need to trust their guts and make sure they have confidence in the provider's ability to maintain a culture of vigilance.

• Plan for the unexpected. Just as wealthy older grooms require their younger, impoverished brides to sign pre-nuptial agreements, bankers need to plan for the worst at the start of the relationship. Part of the contract negotiation process must address termination. Banks must have explicit exit clauses that document those conditions that will nullify the contract and allow the bank to take over processing. In addition to setting the legal parameters, the bank must also plan for the logistical aspects when a processing arrangement terminates. Banks must be clear about the format of the data they will receive in an extract, specify a reasonable timeframe for delivery, and make sure that all definitions and schema are also provided by the vendor.

Short of termination, there are other unforeseen circumstances that can occur. Contracts or service level agreements will include the vendor's incident response plans and when and how suspected or actual events must be communicated to the bank. Liability for data security breaches must be addressed, as well as making sure that the vendor has adequate insurance coverage to support their level of indemnity. Coverage should include any penalties or fines the bank may be subject to in the event of a breach that can be tracked back to negligence or fraud on the part of the provider.

• Square peg, square hole. As mentioned at the start of this piece, banks contracting for public cloud services are buying into a commodity. For most banks, public cloud services are being considered because they can deliver computing capacity at a lower price than on-premises options.

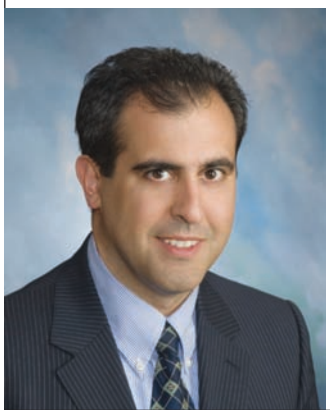
However, banks have higher service requirements than the average business, and some service levels cannot be compromised to reduce costs. Banks must ensure that they are making the right kinds of trade-offs when they procure cloud services, and are choosing a provider that can support a bank's requirements - now and in the future.

Fortunately, public cloud providers make their contract terms and service level agreements publicly available, so banks can educate themselves about the standard options each offers. Although low-cost providers may be attractive, requiring too much customization or additional requirements can diminish the economic returns for the provider, and may not adequately protect the bank.

Best practices dictate that banks seek providers whose standard offerings provide a higher level of service, and can guarantee that they can comply with banking regulations and availability requirements.

Although most banks have experience with traditional outsourcing, and even near-cloud services such as card networks, check image warehouses, and co-location services - for many, the word "cloud" gives them pause. In many ways, accessing shared assets through shared networks is same old, same old for banks. But there are some real differences that banks should focus on when they engage with cloud service providers. ■

Jeanne Capachin is research vice president with IDC Financial Insights.



We Are Still Banking In a Physical World

By Marc DeCastro

In the movie "Monty Python and the Holy Grail," there is an often quoted scene where the town officials are picking up the deceased from the plague and loading them into a cart as the official screams out "bring out your dead." One particular old man is being loaded into the cart who is not exactly fully deceased. The dialog goes like this:

Cart-Driver: "He says he is not dead."

Townsman: (with old man draped over shoulder): "He is quite ill."

Old Man: "I am getting better."

Townsman: "No you are not, you will be stone dead in a moment."

It is easy to compare the old man to today's branch network. Everyone keeps saying the branch is dead, that there is no need for it anymore with all the advances in technology. From a technical standpoint, there is some truth to those beliefs. However, year after year, the branch continues to defy the critics and is in fact not going to be "stone dead" anytime soon.

Let us look into why the branch is in fact not dead yet. In IDC Financial Insights' Consumer Channel Preference Survey, we asked our respondents to identify how they have interacted with their financial institutions over the last 30 days. The 2012 survey had 2,663 respondents; the 2011 survey had 2,560.

CONSUMER BANKING CHANNEL USAGE

	2012	2011
Branch teller	85.1	78.5
Internet	84.8	85.3
Branch ATM	81.8	71.3
Debit card purchase	78.4	67.1
Debit card with cash back	54.9	41.8
At another ATM	48.3	39.5
Mobile	43.8	23.2
Call Center	38.3	24.9

The most often cited transaction type in 2012 was at the branch with a teller. In fact, across all age groups, the teller transaction was still being used at least once a month. This despite the fact that nationwide branch foot traffic continues to dwindle and new technology continues to decrease our need to interact with a human. In fact, all channels, with the exception of online, saw an increase in individuals using the channel at least once in the last 30 days. Interestingly, the main reason for the decline in online is the rise of mobile, so perhaps at some point we will hear the battle cries that online banking will be "stone dead" just like the branches! It is unlikely either will be obsolete any time soon.

This particular survey has been conducted annually for the last four years and the results speak for themselves.

Year after year, the branch continues to defy the critics and is in fact not going to be "stone dead" any time soon.

The trend continues to be that each channel is seeing an increase in customer interaction, but not necessarily in number of transactions con ducted with each channel. For example, the branch transaction for many has contracted from once a week to twice a month or less. If this were the case for all customers, then the total number of branch transactions would have decreased by 50%, but the same number of people will be conducting transactions at least once a month in a branch.

This still requires that the banks and credit unions have a physical presence, despite all the access to technology that helps us skip the teller line. This actually makes staffing the branch more of a challenge, not knowing when those transactions may occur and ensuring a good experience for the customer once at the branch.

If customers were not interested in branch networks, we would see a much higher penetration of customers willing to use 100 percent online institutions. Time will tell if the recently launched Simple (formerly known as BankSimple) will be successful with their "leave your bank" program, which is a product basically built around a debit card with online and mobile banking.

If history is an indicator, Simple will encounter significant head winds without a teller network. It is not just a physical ATM that customers want, they want a teller or platform representative when they walk into a branch. In fact, with remote mobile deposit, even making a deposit has become easier, thus it may put even more of an emphasis to want to bank with an organization that has a physical presence.

From a psychological standpoint, let us look at the way most people digest information and educate themselves on any particular topic. There are three modes of learning styles that define most customers. This research has been around since the 1920's and still resonates today. Your customers are visual, auditory or kinesthetic.

The visual learners like to see things, the auditory learners like to listen, and the kinesthetic learners like to touch. While most people have a dominant characteristic, many people need a combination of two or more modes before making a final decision.

This holds true in banking and financial decisions. On the banking side, one may start a process based on something they have seen - this could be an electronic message from the ATM, from online banking, or driving by a branch and seeing a great rate on some product. They may have started learning from the visual side, but need more input. They then hear a friend talking about the great rate that they got from the same institution, and now it resonates that this may be for them.

They go online, look up more information, then head into the branch to apply for that product. Why didn't they go online and finish the transaction? Perhaps it is because to them it is more important to be able to talk to someone, particularly if it is a complex transaction. This has not changed, no matter how much technology we throw at the customer.

As we continue to see new channels added in banking, the reality is that we are just increasing and spreading out the transactions across both physical and digital worlds. The ATM took some transactions away from the teller, online took some from the ATM, and mobile is taking some from online. What is not changing is that at the core, the face-to-face meeting cannot be ignored. If you know how the scene ends in "Monty Python's Holy Grail," you know that ultimately the old man ends up in the cart. I don't see a similarly gloomy ending for our branch network – at least not for a long time. ■

Marc DeCastro is research director, Consumer Banking at IDC Financial Insights.

Why You Should Care About Merchant-Funded Rewards

By Aaron McPherson

What is often mistakenly referred to as "disintermediation" is in fact intermediation, the insertion of a third party between the service provider and the customer, improving efficiency.

In the last five years, a number of financial institutions, including Bank of America and Regions Bank, have extended their card reward programs with targeted offers generated by merchants. The essential features of the model are as follows:

• Merchants define a target group of consumers, based on such variables as age, income range, address, and total spend in a particular merchant category.

• An intermediary, such as Affinity Solutions, Cartera Commerce or Cardlytics, sends a query to its partner financial institutions, asking for a list of customers that belong to the target group.

• Customers on the list who have opted in to the targeted offer program are sent the offer via e-mail, banner ad on the online banking site, or in-line messages appearing underneath related historical transactions on the online banking site.

What all of these programs have in common is that they enable the financial institution to act as a marketing channel for non-financial businesses. Where the traditional bank loyalty program was focused on increasing usage and sales of bank products, these new programs are focused on non-bank products. The revenue comes in the form of a commission tied to new sales or customer relationships.

This is a substantial paradigm shift, requiring financial institutions to fundamentally rethink their business model. Instead of zealously guarding their customer information, they must be willing to share it, for a price.

However, in a time where the traditional business model is under attack from all sides, incumbents must be willing to move beyond that model and meet their attackers on their own territory.

What is often mistakenly referred to as "disintermediation" is in fact just the opposite, intermediation, the insertion of a third party between the service provider and the customer. In most industries, this occurs to improve efficiency and achieve economies of scale. For example, in consumer packaged goods, distributors reduce the number of interconnections between manufacturers and retailers, keeping a share of the savings for themselves in the form of a markup.

The threat to banks is not so much to their existing business as to their growth prospects; with non-banks seizing most of the new opportunities to add value, banks are trapped in a low-growth, low-margin business, seen primarily as utilities rather than value creators. This has led directly to the increasing willingness on the part of government to establish price controls and restrictions on financial institutions, while non-banks, seen as value creators, are allowed to grow unchecked.

In order to escape from this trap, banks must find ways to exert greater influence over their customers' economic lives.

Reward programs offer a way to do this that builds on the information assets that banks already possess - the transaction history of the consumers that use their payment instruments.

Through their use of services such as Google and Facebook, consumers have strongly signaled that they are willing to sacrifice some personal privacy in exchange for meaningful benefits.

Financial institutions can get their customers' consent to participate in targeted marketing by:

• Explaining the far richer rewards that can be earned through the new system; instead of pennies on the dollar, consumers can get 20% or more. Linking the new rewards to the well-understood coupon can help aid understanding.

• Providing consumers with full control over how many offers they receive, and through which channels.

• Giving consumers an easy way to opt-out of the rewards altogether.

• Partnering with local businesses to encourage participation.

By acting as a channel for targeted rewards, financial institutions can make themselves more relevant to businesses and increase their leverage in negotiations over fees, sales of core financial products, and participation in emerging mobile payment schemes.

If, on the other hand, financial institutions stay in their safe but confining traditional markets, they will face diminishing opportunities. ■

Aaron McPherson is practice director, Payments and Security, at IDC Financial Insights.

How to Change Your Business Model

By David Potterton

The financial services industry continues to be challenged by a number of factors including regulatory/compliance changes and constant cost pressure. In addition, formerly reliable sources of revenue are drying up, especially in the U.S. and many European nations. Therefore, financial institutions should be thinking more strategically around how to redefine their business model in this new era including identifying new sources of revenue and cost containment.

To accomplish these goals, however, financial institutions need to take a good, hard, objective look at their current business model and begin to take some bold steps to move in the direction of their current and potential customers.

However, from our discussions with financial services professionals over the past year, we have come to the unfortunate conclusion that most bankers have not yet recognized that the world as it was pre-2008 no longer exists. It appears we have gone back to business as usual: a small upgrade here, a software tweak there, and let's leave the hard decisions for the next guy to make.

Unfortunately, these are exactly the types of decisions that we believe bankers, as well as their solutions providers, need to reject. Instead, we see a need for dramatic shifts in the banking business to adjust to current and future demands, especially as technologies such as mobile are changing the landscape and have put consumers in charge of when and how they want to deal with financial institutions. Change for the industry can longer be incremental and slow moving as more nimble competitors continue to offer new products and services.

While regulation does not make for a level playing field, that is not to say that banks need to sit on the sidelines pining for the good old days. Here are a few of the proof points we see as to why banks must adapt.

• End User Transformation – The consumerization of IT has the net result of mobile smart devices and apps touching most if not all commerce applications. In addition, end users today have higher expectations for the companies they choose to do business with including bundled products, 24/7 cross channel capability, consistent interactions, greater customization and preference recognition.

For financial institutions, these new expectations necessitate a redefining of numerous areas including customer centricity, customer service, and customer preferences.

Ultimately, the challenge for companies is how to develop the products and services necessary to deliver value based on these new expectations. Therefore, companies need to think strategically about key areas of interaction impacted by changing technology including their solution strategy, OS environment, and cost effective access management. In addition, companies need to determine the level of personalization and customization they will deliver to their end users.

• Enterprise Transformation – Once organizations have decided how they will address their external end user demands for products and services, a key next step is to look inwardly at their ability to deliver. This includes a review of crucial departments such as operations, customer support, marketing, product management, and policy administration to make sure they are aligned to support the new end user. A critical component of this review is the employees themselves, who must have the skills and tools to deliver quality and service to their customers. For example, in some departments there might be a need to use smart mobile devices; either their own or supplied by the organization.

This bring your own device (BYOD) debate is currently taking place in most if not all companies today and has a profound impact on how IT can and should support both current and future employees.

• IT Transformation – The increasing number of access channels, mobile devices, and end user/employee expectations presents particular challenges for IT.

For financial institutions to be successful today, IT can no longer dictate how end users and the enterprise interact but instead must understand the changing dynamics brought about by these technologies and adjust accordingly. This takes true IT and business alignment which starts with understanding the changing business issues in the marketplace.

Once IT has this knowledge and understands the value of supporting this model within the enterprise, it can review the organization's policies, tools, and technology decisions to help differentiate their organization.

Buffeting this need for change are back-end systems that continue to show their age as data processing throughput increases alongside the number of new requirements that need to be reflected in legacy technology environments – new products, new channels, new risk management reporting mandates, and so on. Incidences of operational outages and failures have been well publicized in the past and will become even more frequent as legacy core systems are taken to the point of breaking.

Against this backdrop of legacy infrastructure, changing technology, and real business need, we believe solution providers are in an ideal position to help financial institutions focus on the future and build a more cooperative environment that will be more efficient and allow banks to create truly differentiated services. For these providers, partnering with IT will be critical to success. Some key areas to start include:

• Change the IT operating model to drive cuts but also work across channels for more effective decision making around IT choices.

• Implement technology solutions that provide a single view of the customer through secure integrated channels and a consistent experience.

• Provide key business information such as tracking customer sentiment, usage, and profitability through analytics.

Realistically, however, we believe most financial institutions in the near term will continue to implement relatively minor changes within existing business silos to manage short term profitability expectations.

The unfortunate result will be a continued erosion of profitability under existing business models. For those willing to move more aggressively towards the future, we believe the time to do so is now. ■

From discussions with financial services professionals over the year, we have come to an unfortunate conclusion: most bankers do no yet recognize that the pre-2008 world no longer exists.

David Potterton is vice president of research for the Global Banking, Insurance, Capital Markets and Risk Management practices of IDC Financial Insights.

Can Big Data Become A Big Liability?

By Michael Versace

Almost 48% of firms recently surveyed have implemented, are implementing, or are evaluating financial applications built with big data technologies such as Hadoop and MapReduce.

The world's information ecosystem runs increasingly on what we at IDC describe as "third platform" technologies. The convergence of intelligent devices (consumer products such as smartphones and tablets, as well as smart buildings, smart infrastructure, smart cities, etc.), social networking, pervasive broadband networking, and analytics will undoubtedly redefine the relationships between bankers and their customers and partners.

Banks will use this "third platform" to create products for small to enterprise business users, consumers, students and travelers that will provide content and experiences more tightly linked to their individual pursuits, needs and wants.

These applications and services will be built on innovative mash-ups of the third platform's four pillars and will create solutions and interconnect trillions of things that directly or indirectly affect our lives. Most banking executives agree that they must be successful at embracing these new technologies and the capabilities they enable, or else lose traction in the continuous march toward competitive advantage and improved profitability.

Business architecture, including everything from brand positioning to products and marketing strategies, to customer engagement and operating models, to performance of governance functions will be challenged by these technological advances as many firms look for sustained profitability and growth. Success will be more difficult to come by given current economics, as brands continue to be negatively impacted by performance, media and shareholder pressure, and increased regulatory oversight.

The third platform is already playing out in financial services, as seen in the continued build-out of cloud infrastructure and mobile banking platforms worldwide. But of the four major third platform trends, the implications of big data and analytics, and the infrastructure enabling big data applications seem to be least understood, based on recent interviews with bank IT executives earlier this year. However, more recent data suggests the fog is clearing.

At the end of 2011, IDC Financial Insights forecasted that over 40% of all Tier 1 firms would gear up to execute big data / analytics business and technology strategies in 2012.

Today, this forecast appears conservative, as almost 48% of firms we recently surveyed have implemented, are implementing, or are evaluating third platform financial applications built with big data technologies such as Hadoop and MapReduce, and over 21% plan to invest more than $1 million on their big data strategies in 2012, with a small perentage of firms, less than 4%, planning to invest over $100 million.

Many discussions around big data trends and applications in banking and other regulated industries quickly turn to issues of risk and governance. Can big data become a big liability? The answer is undoubtedly yes. Poor big data governance will most likely lead to management and system failures, breaches, and missteps, which in turn will generate standards, and potentially regulatory guidance. So now is the time for the industry to engage in discussions on a number of big data governance issues, including these top five:

1. Evolution of governance programs – How data governance and organizations' models will evolve with the advent of big data.

2. Ownership and privacy protection – What will be the impact on personal and corporate privacy and ownership protection policies when external data is on-boarded and intermingled with enterprise data.

3. Scalability of security - Can existing information protection and security systems and technologies properly scale to maintain a sustainable risk profile when assessing the confidentiality, integrity, and availability requirements of big data applications.

4. Lifecycle management - Are there new information lifecycle management, data inventory and classification requirements? How should decades-old records management standards of accountability, custody, stewardship, and so forth be applied to the big data trend?

5. Model governance – Analytics and modeling excellence are core to success in our industry. As big data, modeling and analytic excellence rise in importance as a differentiating business capability and compliance requirement, what steps must be taken for financial firms to re-orient GRC programs and explicitly focus on frameworks, goals, and best practices for model governance?

Over at least the last decade, data management has been in a reactive mode, responding to gaps in the environment exposed by inefficiencies, breaches and failures, which have led many times to new legal or regulatory imperatives. These reactions have fueled both the retrofit of existing processes for governing data (e.g., creating Sharepoint storage pools for unstructured content and file based data classifications schemes) and the acquisition of new point solutions to ease the pain of satisfying new requirements, such as electronic discovery. Now enter the era of big data.

The big data trend provides yet another chance to address what has been missing for many – proactive, strategic thinking about the data governance challenge. Data management is no longer only about messaging, databases, and storage, feeds and speeds. The big data trend should force management once again to see the degree to which data is permeating the organization and becoming more than ever the currency of third platform financial services.

The business challenge now is to govern this trend without restricting innovation, by ensuring that all big data is known, declared, classified and managed to maximize value and minimize risk.

Sustainable big data governance has to become part of the DNA of the organization and, like quality controls, embedded in every business process. ■

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